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NOTICE OF ALLOWANCE AND FEE(S) DUE

500 7590 03/11/2008

SEED INTELLECTUAL PROPERTY LAW GROUP PLLC

701 FIFTH AVE SUITE 5400 SEATTLE, WA 98104 EXAMINER

BOESEN, AGNIESZKA

ART UNIT PAPER NUMBER

ART UNIT 1648 DATE MAILED: 03/11/2008

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFREMATION NO.

 10 771,737
 0.2002/2004
 David S. Burt
 484112-410D1
 4042

 TITLE OF INVENTION: PROTEOSOME INFLUENZA VACCINE
 484112-410D1
 4042

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 YES
 \$720
 \$300
 \$0
 \$1020
 06/11/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

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| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) | | | | | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. | | | | |
| 500 7590 09/1/2008 SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVE SUITE 5400 SEATTLE, WA 98104 | | | | | Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmital is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEF address above, or being facsimile transmitted to the USPIO (571) 272-2885, on the date indicated Peter Mail State Peter Service Mail Service Mail State Peter Service Mail Service Mai | | | | |
| SEATTLE, WAS | 90104 | | | | ┕ | | | | (Depositor's name) |
| | | | | | \vdash | | | | (Signature) |
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| APPLICATION NO. | FILING DATE | | FIRST NAMED INVEN | | VTOR | TOR ATTORNEY DOCKET NO | | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/771,737 | 02/03/2004 | | | David S. Burt | | 484112-410D1 | | | 4042 |
| TITLE OF INVENTION: | PROTEOSOME INFL | UENZ. | A VACCINE | | | | | | |
| APPLN. TYPE | SMALL ENTITY | IS | SUE FEE DUE | PUBLICATION FEE I | DUE | PREV. PAID ISSUI | SFEE | TOTAL FEE(S) DUE | DATE DUE |
| nonprovisional | YES | | \$720 | \$300 | | \$0 | | \$1020 | 06/11/2008 |
| EXAMI | NER | | ART UNIT | CLASS-SUBCLASS | | 1 | | | |
| BOESEN, AC | SNIESZKA | | I648 | 530-414000 | | • | | | |
| 1. Change of correspondence address or indication of "Fee Address" (37) CTR 1.363). Change of correspondence address for Change of Correspondence Address from PTO/SB/122) attached. CTR 1.363. Change of correspondence address (or Change of Correspondence Address' indication (or Tee Address' Indication (or | | | | | | | | | |
| Please check the appropria | ate assignee category or | catego | ories (will not be pr | inted on the patent): | | Individual Co | orporati | ion or other private gro | oup entity Government |
| 4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies | | | | h. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) \begin{align*} \times \text{Acids is enclosed.} \\ \begin{align*} \text{Payment by credit card.} \end{align*} Form PTO-2038 is attached. \begin{align*} Director is hereby suthorized to charge the required fee(s), any deficiency, or credit any overpayment, to be posit account Number (enclose an extra copy of this form). | | | | | |
| | SMALL ENTITY statu | s. See | 37 CFR 1.27. | b. Applicant is n | o lon | ger claiming SMAI | LEN | TITY status. Sec 37 Cl | R 1.27(g)(2). |
| NOTE: The Issue Fee and interest as shown by the re | Publication Fee (if requeecords of the United Sta | iired) tes Pat | will not be accepted ent and Trademark | from anyone other t Office. | than t | he applicant; a regi | stered. | attorney or agent; or th | e assignee or other party in |
| Authorized Signature _ | | | | | | Date | | | |
| Typed or printed name | | | | Registration No. | | | | | |
| This collection of informa an application. Confidenti submitting the completed this form and/or suggestio Box 1450, Alexandria, Vir Alexandria, Virginia 2231 | tion is required by 37 C ality is governed by 35 application form to the ons for reducing this bur rginia 22313-1450. DC 3-1450. | FR 1.3 U.S.C USPT den, sl NOT | 11. The informatic 122 and 37 CFR O. Time will vary hould be sent to th SEND FEES OR | on is required to obtai 1.14. This collection depending upon the e Chief Information C COMPLETED FORM | n or i is est indiv Office AS To | retain a benefit by t timated to take 12 i ridual case. Any co er, U.S. Patent and D THIS ADDRESS | he pub minuter mment Trader i. SEN | lic which is to file (and s to complete, includin ts on the amount of tir nark Office, U.S. Dep D TO: Commissioner | by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450, |

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|------------------------------|----------------|---------------------------------|---------------------|------------------|
| 10/771,737 | 02/03/2004 | David S. Burt | 484112-410D1 | 4042 |
| 500 75 | 590 03/11/2008 | EXAMINER | | |
| SEED INTELLE | CTUAL PROPERT | BOESEN, AGNIESZKA | | |
| 701 FIFTH AVE | | | ART UNIT | PAPER NUMBER |
| SUITE 5400 SEATTLE, WA 98 | 3104 | 1648 DATE MAII ED: 03/11/200 | 8 | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 365 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 365 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | |
|------------------|--------------|--|
| 10/771,737 | BURT ET AL. | |
| Examiner | Art Unit | |
| Agnieszka Roesen | 1648 | |

| The MALLING DATE of this communication appears on All claims being allowable. PROSECUTION ON IT HE MERITS IS (OR REherewith (or previously mailed), a Notice of Allowance (PTOL-85) or other NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. Of the Office or upon petition by the applicant. See 37 CFR 1,313 and MF | MAINS) CLOSED in this application. If not included appropriate communication will be mailed in due course. THIS This application is subject to withdrawal from issue at the initial |
|---|--|
| This communication is responsive to <u>December 10, 2007</u>. | |
| The allowed claim(s) is/are <u>1-8 and 12-21</u>. | |
| International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this or | eceived. seeived in Application No thave been received in this national stage application from the |
| noted below. Failure to timely comply will result in ABANDONMENT of THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | this application. |
| A SUBSTITUTE OATH OR DECLARATION must be submitted. No INFORMAL PATENT APPLICATION (PTO-152) which gives reason | |
| CORRECTED DRAWINGS (as "replacement sheets") must be sub (a) including changes required by the Notice of Draftsperson's Pat 1) hereto or 2) to Paper No./Mail Date | tent Drawing Review (PTO-948) attached Iment / Comment or in the Office action of rould be written on the drawings in the front (not the back) of or according to 37 CFR 1.121(d). OLOGICAL MATERIAL must be submitted. Note the |
| Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material | 5. Notice of Informal Patent Application 6. Interview Summary (PTO-413), Paper No./Mail Date 7. Examiner's Amendment/Comment 8. Examiner's Statement of Reasons for Allowance 9. Other |

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Art Unit: 1648

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mae Joanne Rosok on February 27, 2008.

The application has been amended as follows:

IN THE CLAIMS:

Amend the allowed claims 8 and 12 as follows:

8. A method to elicit an immune response against influenza in a subject, said method comprising administering to the subject an influenza vaccine prepared by a method which comprises:

providing a mixture of at least one influenza hemagglutinin (HA) antigen with a proteosome preparation in the presence of detergent, wherein the ratio of proteosomes to antigen is between 2:1 and 8:1; removing detergent from said mixture by diafiltration or ultrafiltration to obtain a proteosome-HA composition, and formulating said composition into a vaccine.

 A method to elicit an immune response against influenza in a subject, said method comprising administering to the subject a composition effective in shifting an Art Unit: 1648

immune response against the influenza infection from a Type 2 response toward a Type 1 response, which composition is prepared by a method which comprises: providing a mixture of at least one influenza hemagglutinin (HA) antigen with a proteosome preparation in the presence of detergent, wherein the ratio of proteosomes to HA is between 2:1 and 8:1; and removing detergent from said mixture by diafiltration or ultrafiltration to obtain a proteosome-HA composition.

Conclusion

Claims 1-8, and 12-21 are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agnieszka Boesen whose telephone number is 571-272-8035. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit: 1648

/Agnieszka Boesen, Ph.D./ Examiner, Art Unit 1648

/Bruce Campell/ Supervisory Patent Examiner, Art Unit 1648